



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10

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OFFICE OF  
ENVIRONMENTAL  
CLEANUP

April 23, 2013



Ms. Amy Essig Desai  
Farallon Consulting, LLC  
975 5<sup>th</sup> Avenue Northwest  
Issaquah, Washington 98027

Mr. Gil Leon  
Early M. Jorgensen Company  
10650 South Alameda  
Lynwood, California 90262

Re: Conditional Approval Subject to Modifications of the *Basis of Design Report, Jorgensen Forge Early Action Area*, March 2013  
Comprehensive Environmental Response, Compensation, and Liability Act  
Administrative Order on Consent, U.S. EPA Docket No. CERCLA 10-2013-0032

Dear Ms. Essig Desai and Mr. Leon:

The U.S. Environmental Protection Agency Region 10 has completed its review of the *Basis of Design Report, Jorgensen Forge Facility Work Plan* dated March 2013. The Work Plan has been prepared for a removal action of contaminated sediments and associated bank soils within the removal action boundary in the Lower Duwamish Waterway Superfund Site adjacent to a portion of the Jorgensen Forge Facility, as required under the above-referenced Administrative Order on Consent.

The EPA conditionally approves, subject to satisfactorily completing the enclosed modifications, the Work Plan dated March, 2013, in accordance with Section VIII of the Order with the exception of Section 2.4. The EPA is not acting on Section 2.4 of this document, entitled "Additional Soil Removal Action" as it is outside the scope of the above-referenced Order.

The EPA also encourages you to continue to have an open dialogue with the Tribes.

The EPA appreciates the time and effort of you and your consultants to discuss EPA's concerns and comments and work with the EPA in responding to those issues in a timely manner. We recognize the efforts you have made over the years on this project, and we appreciate the positive working relationship that has been fostered during the development of this Work Plan.

EMJ013993

## Required Changes to Jorgensen Forge BODR for Final Approval

### Typographical Errors

1. **Figure 7 and Figure 9a:** These figures have different dredge information for a Thiessen polygon in the northwest corner of Remedial Action Boundary (JVE-205/SD-205). JVE-205/SD-205: Figure 7 indicates that contamination above extends to 8-9 feet. However, Figure 9a has a dredge polygon of 1 foot. But Figure 9d, which shows the dredge design surface and Thiessen removal depth cross section appears to have a dredge of approximately 10 feet for the polygon and a dredge design that falls below that. Need to rectify the figures so all show a dredge to point of contamination (8-9 feet).
2. **Page 16:** a typographical error in the second paragraph: RAA-6 is EAA.
3. **Page 27:** There is a statement that the EPA had set the fish window for August 1st, 2013. However, this window is determined by the Services (National Marine Fisheries Service and U.S. Fish and Wildlife Service). Correct the sentence to reflect that.
4. **Table 5: Backfill Chemical Acceptable Criteria:** The following inconsistencies need to be addressed:
  - a. The “Backfill Levels for Final Actions” for Silver is 0.3 mg/kg, not 6.1 mg/kg;
  - b. A “less than” sign needs to be inserted in front of the backfill level for cadmium, mercury and zinc.
5. **Table 1 and Figure 6:** These tables and figures do not define all of the footnotes associated with the values presented. For example, there is no definition for the symbol ‘U’ alongside of the “U\*” in this table/figure, or the “J” in Table 1 (JVE-1). Include these definitions in the footnote section.
  - a. **Figure 6 “Additional Design Sampling Subsurface Total PCB Concentrations”:** There are additional data within Figure 6 that does not appear in Table 1. For example, JVE-322 only has data in Table 1 for 6-12 feet, however Figure 6 has data from 0-12 feet. It appears that Figure 6 combines the newer data with the older data. If this figure is a combination of original and additional sampling results, rename the figure accordingly.
6. **Appendix A: Design Subsurface Characterization Supporting Documents:** Create an index to organize this material.
7. **Appendix E: Water Quality Monitoring Plan**
  - a. **Page 10, Section 3.2.1 (Turbidity):** Clarify that the additional monitoring at 800 feet triggered by turbidity exceeding >59 NTU is based on FWS requirement. Modify the report accordingly to include this requirement.
  - b. **Page 13, Section 3.5 and Figure 4 (monitoring within areas with elevated total PCBs):** Expand the “area of extra concern” for elevated PCBs to include vertical profiles showing multiple CSL exceedances (orange colored) in the northwest and southwest areas of the site.

- b. **Page 16, Section 6.2 (Recontamination within the RAB from Facility Releases):**  
Revise the sequence of contingency response actions to require additional rounds of sediment testing immediately. Data collection must include sampling of the waste discharge system.

**10. Appendix G: Construction Specifications:**

- a. Pages 352023-5: Language in this section implies that the work is dependent on Clean Water Act permits from the Corps of Engineers associated with the dredging activity. Revise this language to make it consistent with a CERCLA NTCRA and the requirements associated with the Order (e.g. Pre-construction Inspection Meeting, page 8 of the SOW attached to the Order).
- b. Pages 017123-2: **Construction Specifications, Appendix G**, page 017123-2.
  - i. Update the following information to these reference throughout this document:
    - 1. U.S. Army Corps of Engineers (USACE) - EM 1110-1-1005 (January 2007) USACE Engineering and Design – Control and Topographic Surveying. *Corrected URL:* [http://140.194.76.129/publications/eng-manuals/EM\\_1110-1-1005\\_sec/toc.htm](http://140.194.76.129/publications/eng-manuals/EM_1110-1-1005_sec/toc.htm)
    - 2. USACE - EM 1110-2-1003 (*April 2004 – Change 1*). USACE Hydrographic Surveying Engineering Manual. *Corrected URL:* [http://140.194.76.129/publications/eng-manuals/EM\\_1110-2-1003\\_pfl/toc.pdf](http://140.194.76.129/publications/eng-manuals/EM_1110-2-1003_pfl/toc.pdf)

**Geoprobe data associated with property line storms pipes**

Sections 2.2.2.1 and 10.4 of the Work Plan cite Geoprobe borings that will be taken to characterize sediment and soil quality prior to the installation of a sheetpile wall near the northeast portion of the Remedial Action Boundary (RAB). This work is occurring during the cleanup of two northern property line storm pipes (Jorgensen Forge Outfall Site), a separate removal action occurring under a separate EPA Order on Consent issued to Jorgensen Forge Corporation and The Boeing Company (Docket No. CERCLA 10-2011-0017). The Jorgensen Forge Outfall Site Cleanup is anticipated to occur under a future modification of this Order.

The Work Plan states that the data collected during the Jorgensen Forge Outfall Site Cleanup “will inform whether additional removal below the current design shoreline bank excavation grades will be necessary during the removal action in the RAB and the appropriate disposal removal facility for any additional removed materials.” (P. 14). The intent is to take data collected under the Storm Pipe Cleanup Order and apply it to further inform this removal within the RAB.

The sampling and analysis of the additional characterization shall comply and be in accordance with the EPA approved Storm Pipe Cleanup Order, and its associated Sampling and Analysis Plan (SAP). As long as the collection and analysis of the Geoprobe borings comply with the applicable requirements in the EPA approved SAP of associated with the Storm Pipe Cleanup Order, the EPA may authorize